

S/N 10/763,625

Response to Office Action Dated 01 December 2005

In the Claims

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2 1. 1—37 (Cancel)

3
4 38. (New.) A coated substrate configured for printing a toner image
5 thereon, comprising:

6 a substrate;

7 an underlayer coating, applied directly on the substrate, wherein the
8 underlayer coating comprises amine terminated polyamide; and

9 an overlayer coating, applied directly on the underlayer coating, comprising
10 a polymer material to which the toner image can be fused and fixed.
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13 39. (New.) The coated substrate according to claim 38, wherein the
14 substrate is selected from among a group of substrates comprising polyethylene,
15 vinyl, paper, polyethylene terephthalate (PET), BOPP (biaxially oriented
16 polypropylene film) and polycarbonate.
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19 40. (New.) The coated substrate according to claim 38 wherein the
20 overlayer coating is free of particulate matter.
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23 41. (New.) The coated substrate according to claim 38 wherein the
24 polymer material comprises styrene butadiene copolymer.
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1 42. (New.) The coated substrate according to claim 38 wherein the
2 polymer material comprises ethylene acrylic acid copolymer.

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4 43. (New.) A print media for printing a toner image thereon,
5 comprising:

6 a substrate coated with an underlayer having a high affinity for the
7 substrate, and an overlayer having a high affinity for toner, wherein the underlayer
8 and the overlayer have high affinity for each other;

9 wherein the underlayer is applied directly to the substrate and comprises
10 amine terminated polyamide; and

11 wherein the overlayer is applied directly to the underlayer and comprises a
12 polymer material defining an outer surface to which the toner image can be fused
13 and fixed.
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17 44. (New.) The print media according to claim 43, wherein the substrate
18 is selected from among a group of substrates comprising polyethylene, vinyl,
19 paper, polyethylene terephthalate (PET), BOPP (biaxially oriented polypropylene
20 film) and polycarbonate.

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22 45. (New.) The print media according to claim 43 wherein the
23 underlayer is free of particulate matter.
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1 46. (New.) The print media according to claim 43 wherein the overlayer
2 comprises styrene butadiene copolymer.

3
4 47. (New.) The print media according to claim 43 wherein the overlayer
5 comprises ethylene acrylic acid copolymer.

6
7 48. (New.) A method of producing a coated substrate to which a toner
8 image can be adhered, comprising:

9 coating a substrate with an underlayer comprising amine terminated
10 polyamide; and

11 coating the underlayer with a polymer material to form an overlayer on the
12 underlayer, wherein the overlayer has a high affinity for the underlayer and an
13 outer surface to which the toner image can be applied.
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16 49. (New.) The method of claim 48, wherein coating the substrate
17 comprises:

18 coating a paper substrate.
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21 50. (New.) The method of claim 48, wherein coating the substrate
22 comprises:

23 coating a plastic sheet substrate.
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1 51. (New.) The method of claim 48, wherein coating the substrate
2 comprises applying 0.1 to 0.3 grams of solids to the substrate per square meter of
3 the substrate.

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5 52. (New.) The method of claim 48, wherein coating the substrate
6 comprises:

7 mixing a 19-to-1 ratio of 1-Propanal to Macromelt 6239 (Henkel);
8 stirring the mixture; and
9 heating the mixture to between 40 degrees C. and 50 degrees C., until a
10 homogeneous and clear 5% solids solution is obtained.
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13 53. (New.) The method of claim 48, wherein coating the substrate
14 comprises:

15 coating the substrate with a partial solids solution; and
16 letting the partial solids solution dry.
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19 54. (New.) The method of claim 53, wherein the partial solids solution
20 is a 5% solids solution.
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1 55. (New.) The method of claim 48, wherein coating the underlayer
2 comprises:

3 combining deionized water and isopropyl alcohol to form a mixture;

4 cooling the mixture; and

5 adding the mixture to a dispersion of MP 4990.
6

7 56. (New.) The method of claim 55, wherein the dispersion of MP 4990
8 is in a range of 32% to 35%.
9
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11 57. (New.) The method of claim 48, wherein coating the underlayer
12 comprises:

13 applying 0.3 to 0.5 grams of the polymer material per square meter of
14 underlayer.
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16 58. (New.) The method of claim 48, wherein coating the underlayer
17 comprises:
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19 drying the underlayer before applying the outerlayer.
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